

Regulation Adopting and Amending Certain Editions
of the National Fire Codes Re. Bldg. Construction

18-94

Department of Fire and Rescue Services

Montgomery County Regulation on:

FIRE SAFETY CODE - BUILDING CONSTRUCTION
DEPARTMENT OF FIRE AND RESCUE SERVICES

Issued By: County Executive
Regulation No: 18-94
Authority: Code Section 22-13
Supersedes: Executive Regulation 18-90
Council Review: Method 2 under Code Section 2A-15
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- SUMMARY: The proposed regulation adopts and amends certain National Fire Codes and Standards related to life safety.
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- STAFF: For further information, contact Fire Marshal Theodore Jarboe, Department of Fire and Rescue Services, 301-217-2441.
- BACKGROUND: This regulation supersedes Executive Regulation 18-90. Its purpose is to adopt currently published standards of the National Fire Codes and amend them to be consistent with Maryland and Montgomery County laws.

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Sec. 1 In accordance with the procedures authorized in Chapter 22, "Fire Safety Code," of the Montgomery County Code, 1994, the following Executive Regulation must apply to the safeguarding of life, property, and the public welfare from the hazards of fire and explosion arising from the improper storage, handling, or use of substances, materials, or devices and from conditions hazardous to life, property, and the public welfare in the use or occupancy of buildings, structures, sheds, tents, lots or premises.

This Executive Regulation supersedes Executive Regulation 18-90, dated December 13, 1990, on the day it becomes effective.

Sec. 2 Unless otherwise noted, all references to the National Fire Codes and Standards adopted in these regulations are to those codes, standards, recommended practices and manuals in the National Fire Codes, published annually by the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269. The references to these National Fire Codes and Standards are set forth in Section 22-14 of the Montgomery County Code, 1984

Sec. 3 Standards Adopted. The following standards published by the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, are adopted in their entirety in these regulations except as otherwise amended. The text of these adopted standards is fully enforceable as other regulations adopted under the provisions of Chapter 22 of the Montgomery County Code 1994, as if they were incorporated and printed in their entirety. The dates or editions of the individual codes and standards are as listed in this section. The standards adopted pursuant to these regulations do not waive any provision of Chapter 22, nor are they less restrictive than its provisions. The codes and standards editions listed in this section apply to all of the sections, in this regulation, which follow.

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<u>NFPA NO.</u>	<u>CODE OR STANDARD</u>
10	Standard for the Installation of Portable Fire Extinguishers (1990)
30	Flammable and Combustible Liquids Code (1993)
30A	Automotive and Marine Service Station Code (1993)
30B	Aerosol Products Manufacture & Storage (1990)
31	Installation of Oil Burning Equipment (1992)
32	Standard for Dry Cleaning Plants (1990)
33	Standard for Spray Application Using Flammable and Combustible Materials (1989)
34	Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids (1989)
35	Standard for the Manufacture of Organic Coatings (1987)
36	Standard for Solvent Extraction Plants (1993)
37	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines (1994)
40	Standard for the Storage and Handling of Cellulose Nitrate Motion Picture Film (1988)
40E	Code for the Storage of Pyroxylin Plastic (1993)
43A	Code for the Storage of Liquid and Solid Oxidizers (1990)
43D	Code for the Storage of Pesticides in Portable Containers (1986)
45	Standard on Fire Protection for Laboratories Using Chemicals (1991)
50	Standard for Bulk Oxygen Systems at Consumer Sites (1990)
50A	Standard for Gaseous Hydrogen Systems at Consumer Sites (1994)

- 50B Standard for Liquefied Hydrogen Systems at Consumer Sites (1994)
- 51 Standard for the Design and Installation of Oxygen Fuel Gas
Systems for Welding and Cutting and Allied Processes (1992)
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<u>NFPA No.</u>	<u>CODE OR STANDARD</u>
51B	Standard for Fire Prevention in Use of Cutting and Welding Processes (1989)
52	Standard for Compressed Natural Gas (CNG) Vehicular Fuel Systems (1992)
54	National Fuel Gas Code (1992)
55	Compressed and Liquefied Gases in Portable Cylinders (1993)
58	Standard for the Storage and Handling of Liquefied Petroleum Gases (1992)
59	Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants (1992)
59A	Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG) (1994)
80	Standard for Fire Doors and Fire Windows (1992)
81	Standard for Fur Storage, Fumigation and Cleaning (1986)
82	Standard on Incinerators, Waste and Linen Handling Systems and Equipment (1994)
86	Standard for Ovens and Furnaces (1990)
88A	Standard for Parking Structures (1991)
88B	Standard for Repair Garages (1991)
90A	Standard for the Installation of Air Conditioning and Ventilating Systems (1993)
91	Standard for the Exhaust Systems for Air Conveying of Materials (1992)
92A	Recommended Practice for Smoke Control Systems (1993)

- 92B Guide for Smoke Management Systems in Malls, Atria, and Large Areas (1991)
- 96 Standard for the Installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment (1994)

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<u>NFPA NO.</u>	<u>CODE OR STANDARD</u>
99	Standard for Health Care Facilities (1993)
99B	Hypobaric Facilities (1993)
101	Code for Safety to Life from Fire in Buildings and Structures (1994)
101M	Manual on Alternative Approaches to Life Safety (1992)
102	Standard for Assembly Seating, Tents, and Membrane Structures (1992)
105	Recommended Practice for the Installation of Smoke-Control Door Assemblies (1993)
110	Standard for Emergency and Standby Power Systems (1993)
130	Standard for Fixed Guideway Transit Systems (1993)
211	Standard for Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances (1992)
214	Water Cooling Towers (1992)
231	Standard for General Storage (1990)
231C	Standard for Rack Storage of Materials (1991)
231D	Standard for Storage of Rubber Tires (1989)
231F	Standard for Storage of Roll Paper (1987)
232	Standard for the Protection of Records (1991)
241	Standard for Safeguarding Construction, Alteration and Demolition Operations (1993)
321	Standard on Basic Classification of Flammable and Combustible

Liquids (1991)

327 Standard Procedures for Cleaning and Safeguarding Small Tanks and Containers without entry (1993)

386 Standard for Portable Shipping Tanks for Flammable and Combustible Liquids (1990)

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<u>NFPA NO.</u>	<u>CODE OR STANDARD</u>
407	Standard for Aircraft Fuel Servicing (1990)
409	Standard on Aircraft Hangars (1990)
418	Standard for Rooftop Heliport Construction and Protection (1990)
490	Code for the Storage of Ammonium Nitrate (1993)
495	Explosive Materials Code (1992)
501A	Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities (1992)
505	Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Maintenance and Operation (1992)
654	Standard for the Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries (1988)
664	Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities (1993)
704	Standard System for the Identification of the Fire Hazards of Materials (1990)
850	Electric Generating Plants (1992)
1123	Outdoor Display of Fireworks (1990)
1124	Manufacture, Transfer, and Storage of Fireworks (1988)
1126	Use of Pyrotechnics before a Proximate Audience (1992)

Sec. 4 NFPA No. 80, subparagraph 1-9.2 is changed to read as follows:
Release of fire doors and shutters must be accomplished by one or more of the following:

- (a) Approved local smoke detection at the doors
- (b) Approved area smoke detection per NFPA 72
- (c) Full automatic sprinkler protection per NFPA 13, water flow interlock

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Sec. 5 NFPA No. 88B, subparagraph 2-2.1 is amended by adding the following Exception:

Exception: In buildings protected throughout with "approved" automatic sprinkler protection, separation must consist of such assemblies having a fire resistance rating of not less than one (1) hour with all openings therein provided with approved minimum twenty (20) minute fire resistance rated opening protectives.

Sec. 6 NFPA No. 88B, subparagraph 2-2.3 is amended by adding the following Exception:

Exception: In buildings protected throughout with "approved" automatic sprinkler protection, separation is required from the garage only and must consist of such assemblies having a fire resistance rating of not less than one (1) hour, with all openings therein provided with approved twenty (20) minute fire resistance rated opening protectives.

Sec. 7 NFPA No. 90A, subparagraph 4-4.4.2 is amended to read as follows:
In addition to the requirements of 4-4.3, when an approved protective signaling system is installed in the building, the smoke detectors required by the provisions of 4-4 must be connected to the protective signaling system in accordance with the requirements of the National Fire Alarm Code (NFPA 72), and Executive Regulation adopting and amending certain standards of the National Fire Code regarding fire protection systems.

Sec. 8 NFPA No. 96, subparagraph 1-1 is amended by the addition of an Exception to read as follows:

Exception: In day care facilities doing food warming only, Home Economics classrooms in schools, and lodging or rooming houses or board and care in existing structures originally built for single family residential use, alternative protection consisting of a recirculating residential type hood and self-contained U.L. listed extinguishing system, installed in accordance with manufacturer's instructions, with no ventilation duct, is permitted. Installation must otherwise conform to this and any other appropriate standard.

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- Sec. 9** NFPA 101 is amended by deleting the following paragraphs or subparagraphs: 5-2.3.9.2 (Exception to "c"), 5-2.3.10.2(b), 6-2.1, 6-2.4.5(b), 7-6.3.2 (Exceptions No. 2, No. 3, and No. 5 only), 7-6.5.3, 7-6.7, 8-1.6, 8-2.2.2.3 (Exception No. 1 only), 8-3.2.1.2, 8-3.2.1.3, 8-3.2.1.11, 9-1.6, 9-3.2.1.11, 10-7.1.6.1, 11-7.1.6.1, 12-1.6.2, 12-6.1.6, 13-1.6.2, 13-6.1.6, 14-1.6, 15-1.6, 15-3.5.2, 16-3.4.3.2 (Exception only), 18-3.4.3.2 (Both Exceptions only), 19-3.5.6, 22-3.1.3, 22-4.1.4, 23-2.1.3, 23-3.1.3, 23-4.1.4, 24-3.5.3, 24-4.4.3.3(b), 25-2.4(a), 25-3.4.3.1(b), 25-3.5.2, 26-3.5, 27-2.4.2(a) and 27-3.5
- Sec. 10** NFPA 101 is amended by the addition of subparagraph 1-5.4 to read as follows: The use of NFPA 101M to justify equivalency concepts is not permitted in new construction.
- Sec. 11** NFPA 101, subparagraph 3-2 is amended by adding the following definition:
Level of Exit Discharge: A floor or level with 50% or more of its required number and capacity of exits, consisting of exterior exit doors on that floor or level, discharging on or within 21 inches of adjoining exterior grade. (Note that, under this definition, it is possible for certain buildings to have more than one level of exit discharge).
- Sec. 12** NFPA 101, subparagraph 5-2.1.4.2 is amended to read as follows: Doors must swing in the direction of exit travel, where serving a high hazard area.
- Sec. 13** NFPA 101, subparagraph 5-2.1.4.3 is amended by numbering the "Exception" as Exception No. 1 and adding an Exception No. 2 to

read as follows:

Exception No. 2: Doors with "approved" self-closing devices which are normally kept closed and locked (from the outside) accessing normally unoccupied areas.

- Sec. 14** NFPA 101, subparagraph 5-2.1.5.2 is amended as follows: In Exception No. 1, add an item (f), to read as follows:
- (f) Entry levels must allow free access to an approved second exit. These levels must be designated in "core/shell" building permit drawings with future tenant layouts arranged accordingly.

*5-2.3.9.2(c), 5-2.3.10.2(b) {Delete per Sec. 9 of this regulation.}

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- Sec. 15** NFPA 101, subparagraph 5-3.3.1 is amended by the addition of an Exception to read as follows:

Exception: Where previously "approved" arrangement is in existing buildings other than health care, with full automatic sprinkler protection per Sec. 7-7, the figures noted are decreased by one third of their printed value.

- Sec. 16** NFPA 101, subparagraph 5-5.1.3 is amended by the addition of a second paragraph to read as follows: In non-sprinklered new buildings, parallel paths at least forty (40) feet apart, or separated by assemblies having continuous one hour fire resistance with self-closing and positive latching twenty (20) minute fire resistance rated opening protectives, are considered remote. In fully sprinklered buildings and existing buildings parallel paths at least thirty (30) feet apart, or separated by assemblies with self-closing opening protectives which are resistant to the passage of smoke, are considered remote. This minimum separation of paths must not be deemed to supersede minimum separation of exits or doors in 5-5.1.4

- Sec. 17** NFPA 101, subparagraph 5-5.1.5 is amended to read as follows: Interlocking, or "scissor" stairs must be considered a single exit, but are credited for added capacity.

Exception: Existing buildings where the stairways are separated from each other by two hour fire resistance rated noncombustible construction.

- Sec. 18** NFPA 101, subparagraph 5-5.1.7 is amended by the addition of an Exception to read as follows:

Exception: As noted in Chapters 8-30 or in this regulation.

- Sec. 19** NFPA 101, subparagraph 5-7.2 is amended by changing (c) and its Exceptions to (d) and adding a new (c) to read as follows: (c) Exit discharge through garage or loading dock areas must be permitted only in accordance with the following:
- (1) Area must not be high hazard as defined by Sec. 4-2.2.4.
 - (2) Discharge must not be subject to locking.
 - (3) A discharge aisle not less than 44" wide, defined by a minimum 42" height fixed barrier along its entire length, must be provided.
 - (4) The path of travel must be direct, continuously maintained in an unobstructed condition, and must be defined in "approved" manner.
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- Sec. 20** NFPA 101, subparagraph 5-10.4.2 is amended by the addition of a third sentence to read as follows: If the sign is on the door, then the door must be equipped with approved self-closing device.

*6-2.1, 6-2.4.5(b) [Delete per Sec. 9 of this regulation]

- Sec. 21** NFPA 101, subparagraphs 6-2.4.5(c), (d), and (h) are amended as follows: (1) In 6-2.4.5(c) add a second sentence to read: Buildings, wherein the communicating space(s) is (are) provided with automatic smoke detection and alarm in accordance with Sec. 23 of this regulation, will be considered to satisfy the requirements of "readily obvious". (2) To 6-2.4.5(c) add an Exception to (c), and to 6-2.4.5(d) add an Exception No. 3 to (d) to read: Existing buildings. (3) In 6-2.4.5(h) add an exception to read as follows:

Exception to (h): Where the communicating space(s) is (are) provided with automatic detection and alarm as noted in (1) above and listed commercial quick response sprinkler heads per Executive Regulation adopting and amending certain standards of the National Fire Code regarding fire protection systems.

- Sec. 22** NFPA 101, subparagraph 6-2.4.6(f)3 is fully changed to read as follows: Manual controls that are located at the annunciator panel or in the Fire Control Room.

- Sec. 23** NFPA 101, subparagraphs 7-6.2.7 and 7-6.2.8 are amended by the

addition of the following sentence: Environments not suitable for smoke detectors (due to high probability of unwanted alarms) must be provided with listed rate-of-rise heat detection.

Sec. 24 NFPA 101, subparagraph 7-6.3.2 Exceptions No. 1 and No. 4 are amended to read as follows:

Exception No. 1: Where noted in Chapters 8-30, a pre-signal or positive alarm sequence system must be permitted when the initial fire alarm signal is automatically transmitted without delay to a U.L. listed central station, in accordance with 7-6.1.4.

Exception No. 4: Duct detectors used for closing dampers or heating, ventilating, and/or air conditioning shut down in accordance with Sec. 7 of this regulation.

Exceptions No. 3 and No. 5 deletions noted in Sec. 9 of this regulation are also applicable to this subparagraph.

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Sec. 25 NFPA 101, subparagraph 7-6.3.6 is amended by the addition of a second sentence to read as follows: Required audibility must be met with any and all intervening doors (between any space and the audible devices) closed.

Sec. 26 NFPA 101, subparagraphs 7-6.3.8, 8-3.4.3, 9-3.4.3, 24-3.4.3.2, 24-4.4.3.4, 25-3.4.3.2, 25-4.4.3.4, 26-3.4.3.2, 26-4.2.3.2, 27-3.4.3.2, and 30-8.3.1 are amended by the addition of a paragraph to read as follows: Where voice type occupant notification is used, automatic pre-recorded message must be used complying with Section 7-6. Live voice as the sole notification method is prohibited.

Exception: Previously "approved" live voice systems.

Sec. 27 NFPA 101, subparagraph 7-6.4 is amended by deleting all text (including the exception) following the word "automatically" in the second paragraph, and replacing with "to a U.L. listed central station in accordance with 7-6.1.4."

Sec. 28 NFPA 101, subparagraph 7-6.5.2(c) is amended by the addition of an Exception to (c) to read as follows:

Exception to (c): Manual fire alarm initiation must not activate floor or zone-dependent smoke control systems.

*7-6.5.3, 7-6.7 [Delete per Sec. 9 of this regulation]

Sec. 29 NFPA 101, subparagraph 7-7.1.1 Exceptions 1 and 2 are deleted and replaced by the following exception to read:

Exception: NFPA 13D and 13R must be used as contained in the scope of those standards.

Sec. 30 NFPA 101, subparagraph 7-7.1.2 is amended to read as follows: Sprinkler piping serving not more than ten (10) sprinklers for any isolated hazardous area, as an alternate to installation per NFPA 13, must be connected directly to a domestic water supply system with all piping arranged and sized per NFPA 13, and the sprinkler piping must be valved with the domestic water system. Any and all work must be performed by a licensed sprinkler contractor.

Sec. 31 NFPA 101, subparagraph 7-7.2.2 is amended to read as follows: Where supervised automatic sprinkler protection is required by another section of this Code, waterflow alarms must be automatically transmitted to a U.L. listed central station in accordance with 7-6.1.4.

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*8-1.6, 9-1.6 [Delete per Sec. 9 of this regulation]

Sec. 32 NFPA 101, subparagraph 8-1.7.1 and 9-1.7.1 are amended by the addition of an item (j), to read as follows: (j) Courtrooms other than fixed seating areas - 40 sq. ft. per person.

*8-2.2.2.3, 8-3.2.1.2, 8-3.2.1.3, 8-3.2.1.11, 9-3.2.1.11 [Delete per Sec. 9 of this regulation]

**8-3.4.3, 9-3.4.3 [Amend per Sec. 26 of this regulation]

Sec. 33 NFPA 101, subparagraph 8-3.5.1 is amended to read as follows: Buildings containing Class A, B, or C assembly occupancies above or below the level(s) of exit discharge, or Class A or B assembly occupancies on a level of exit discharge must be protected with full automatic sprinkler protection installed in accordance with Sec. 7-7.

Exception No. 1: Assembly occupancies solely on a level of exit discharge, used primarily for worship with fixed seating, (including ancillary related use spaces), and

provided with listed two hour fire resistant separation per Section 6-2.2, from other assembly areas an/or other occupancies, and provided with a minimum of 50% of the required capacity and number of means of egress independent from other fire compartments.

Exception No. 2: Assembly occupancies solely on a level of exit discharge, consisting of a single multi-purpose room (with ancillary areas such as kitchen, closets, foyers, mechanical rooms, etc.), less than 12,000 sq. ft. and not used for exhibition or display, and provided with listed fire compartmentation and independent egress as noted in Exception No. 1.

Exception No. 3: Gymnasiums, skating rinks, swimming pools, etc., located solely on a level of exit discharge (including ancillary spaces on the same level such as locker rooms/shower rooms, weight rooms, aerobics rooms, etc.) used exclusively for participant sports/conditioning, with no audience facilities for more than 300, and provided with listed fire compartmentation and independent egress, as noted in Exception No. 1.

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Exception No. 4: Sprinkler protection is not required over areas devoid of fuel loading (such as over pool water surface, or over a court of noncombustible construction with only appurtenant court occupancy), if provided with "approved" draftstopping around the area of omission, in accordance with NFPA 13.

Sec. 34 NFPA 101, subparagraph 8-4.6.1 is amended to read as follows: All special amusement buildings, regardless of occupant load, must meet the requirements for assembly occupancies, in addition to the requirements of this subsection. Special amusement buildings with an occupant load of 1-300 persons must be considered Class C Assembly occupancies.

Sec. 35 NFPA 101, subparagraph 10-2.11.1 (second sentence only) is amended to read as follows: Such window must be openable from the inside without the use of tools, keys, special knowledge, or excessive force and must provide a clear opening of not less than 20 in. (50.8 cm) in width, 24 in. (61 cm) in height, and 5.7 sq. ft. (.53

sq. m.) in area.

Sec. 36 NFPA 101, subparagraph 10-3.6 Exception No. 2 is amended by the addition of a second sentence to read as follows: Door closers are not required.

*10-7.1.6.1, 11-7.1.6.1 [Delete per Sec. 9 of this regulation]

Sec. 37 NFPA 101 is amended by the addition of a new subparagraph 10-7.3.5.1 to read as follows: Buildings containing new day care centers above or below the level(s) of exit discharge must be protected with full automatic sprinkler protection installed in accordance with Sec. 7-7.

Sec. 38 NFPA 101, Sections 10-8, 11-8, and 11-9 are amended as follows:

- a. Subparagraph 10-8.1.4.1(a) is amended by deleting "more than three but", changing "seven clients" to "nine clients", changing "six clients" to "eight clients", and adding a new sentence to read: Where more than two clients, up to four clients incapable of self-preservation are being cared for, a minimum of two staff personnel must be present at all times.
- b. Subparagraph 10-8.1.4.1(b) is amended by changing "at least seven" to "at least nine", and changing "no more than three clients" to "no more than four clients."

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- c. Add new subparagraphs 10-8.2.2.1 and 11-9.2.2.1 to read as follows: In a Family Day Care Home, a sliding door used as a required means of egress must comply with the following conditions:
 - (1) The sliding door must have no more than one, easily operated, locking device that does not require special knowledge, effort, or tools to operate.
 - (2) There must not be draperies, screens, or storm doors that could impede egress.
 - (3) The sill or track height must not exceed 1/2 inch above the interior finish floor.
 - (4) The surface onto which exit is made must be an

all weather surface such as a deck, patio, sidewalk, etc.

- (5) The floor level outside the door must be a maximum of one step lower than the inside, but not more than 8 nor less than 4 inches lower.
 - (6) The sliding door must open to a clear open width of at least 28 inches.
 - (7) Before day care use each day the sliding door must be unlocked and tested to the full required width to be sure it is operating properly. The door must be non-binding and slide easily.
 - (8) During periods of snow or freezing rain, door tracks must be cleared out and the door opened periodically throughout the day, in order to assure proper operation.
- d. Add new subparagraphs 10-8.2.11.3 and 11-9.2.11.4 to read as follows: In Family Day Care Homes, dead-bolt locks must be provided with approved interior latches, or these locks must be of a captured-key design from which the key cannot be removed from the interior side of the lock, when the lock is in the locked position. These locks must be unlocked at all times the home is occupied for the purpose of family day care.

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Exception: A double-keyed dead-bolt lock must be permitted on the secondary means of escape, provided the key is readily accessible and the lock is unlocked at all time the home is occupied for the purpose of family day care.

- e. Subparagraph 11-8.1.1.1 is amended by changing "seven" to "nine."
- f. Subparagraph 11-8.1.1.2 is amended by changing "three" to "four."
- g. Subparagraph 11-9.1.1.1 is amended by deleting "more than three but" and by changing "seven" to "nine."

- h. Subparagraph 11-9.1.1.2 is amended by changing "six clients" to "eight clients", and adding a new sentence to read: Where more than two clients, up to four clients incapable of self-preservation are being cared for, a minimum of two staff personnel must be present at all times.

*12-1.6.2, 12-6.1.6, 13-1.6.2, 13-6.1.6 [Delete per Sec. 9 of this regulation]

Sec. 39 NFPA 101 is amended by renumbering printed subparagraphs 12-6.3.5.1 and 12-6.3.5.2 to new subparagraphs 12-6.3.5.2 and 12-6.3.5.3 respectively and changing 12-6.3.5.1 to read as follows: Buildings containing new ambulatory health care centers located above or below the level(s) of exit discharge must be protected with full automatic sprinkler protection installed in accordance with Sec. 7-7.

*14-1.6, 15-1.6 [Delete per Sec. 9 of this regulation]

Sec. 40 NFPA 101, subparagraph 14-3.5.2 is amended as follows: Full automatic sprinkler protection, in accordance with Section 7-7, must be provided in all new detention and correctional facilities.

*15-3.5.2, 16-3.4.3.2 [Delete per Sec. 9 of this regulation]

Sec. 41 NFPA 101, all exceptions to the following subparagraphs: 17-3.5.1, 18-3.5.1, 19-3.5.1, 20-3.5.1, 22-2.3.5.1, and 22-.3.3.5.1, 23-2.3.5.1 and 23-3.3.5.1 are superseded by Executive Regulation 19-94. NFPA 13R must be used as noted by Executive Regulation adopting and amending certain standards of the National Fire Code regarding fire protection systems.

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Sec. 42 NFPA 101, subparagraph 18-2.4 and 19-2.4 are amended as follows:

Exception No. 2 is hereby amended as follows:

In the base paragraph, change "four or fewer stories" to

- (1) "four stories or less in height plus a basement story below grade (as defined by the Building Code)."
- (2) "In item a, after the word "and" insert "in buildings containing a total of five stories, the stairway must be arranged as an "approved"

outside stairway, and"

- (3) In item b, change "one half story below the level of exit discharge" to "one basement story below grade (as defined by the Building Code), and"
- (4) Add an item (f) to read: Only in buildings containing a total of five stories, both the basement story below grade and the first story above grade (as defined by the Building Code) must be arranged as levels of exit discharge as defined in Sec. 12 of this regulation.

*18-3.4.3.2 [Delete per Sec. 9 of this regulation]

Sec. 43 NFPA 101, subparagraph 19-3.1.1, Exception No. 3 is amended to read as follows: In previously "approved" buildings with sprinkler protection per Sec. 19-3.5, fire resistance of walls must be 3/4 hr., and doors must be minimum 1-3/4" solid wood bonded core, without glazing, in hollow metal eighteen (18) gauge steel frames.

***18-3.5.1, 19-3.5.1, 20-3.5.1 [Amend per Sec. 41 of this regulation]

Sec. 44 NFPA 101 is amended by adding a new subparagraph 21-1.2.3 to read as follows: For requirements of mixed mercantile or business and residential occupancies, refer to Secs. 46 or 48 in this regulation.

Sec. 45 NFPA 101, subparagraph 21-2.2.1 is amended to read as follows: In any dwelling of more than two rooms, every sleeping room must have at least one primary means of escape and on secondary means of escape.

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***22-2.3.5.1, 22-3.3.5.1, 23-2.3.5.1, 23-3.3.5.1 [Amend per Sec. 41 of this regulation]

*22-3.1.3, 22-4.1.4, 23-2.1.3, 23-3.1.3, 23-4.1.4 [Delete per Sec. 9 of this regulation]

Sec. 46 NFPA 101 is amended by the addition of new subparagraphs 24-1.2.2.3 and 25-1.2.2.4 to read as follows: Structures that are predominantly residential dwellings, and that include mercantile

occupancy open to the general public, must have substantial separation between the occupancies that is resistant to the passage of smoke. Openings must be protected with self-closing minimum 1 3/4" solid wood bonded core doors, in minimum eighteen (18) gauge steel frames.

*25-2.4(a) [Delete per Sec. 9 of this regulation]

Sec. 47 NFPA 101, subparagraph 24-3.4.1 and 25-3.4.1 are amended to read as follows: General. Class A mercantile occupancies and multiple story Class B mercantile occupancies must be provided with a fire alarm system in accordance with section 7-6.

**24-3.4.3.2, 24-4.4.3.4, 25-3.4.3.2, 25-4.4.3.4 [Amend per Sec. 26 of this regulation]

*24-3.5.3, 24-4.4.3.3(b), 25-3.4.3.1(b), 25-3.5.2 [Delete per Sec. 9 of this regulation]

Sec. 48 NFPA 101 is amended by the addition of new subparagraphs 26-1.2.2.3 and 27-1.2.2 to read as follows: Structures that are predominantly residential dwelling, and that include business occupancy open to the general public, must have substantial separation between the occupancies that is resistant to the passage of smoke. Openings must be protected with self-closing minimum 1 3/4" solid wood bonded core doors in minimum eighteen (18) gauge steel frames.

Sec. 49 NFPA 101, subparagraph 26-1.7, for "shell" spaces/buildings only, is amended on the fourth line by changing "100" to "80".

Sec. 50 NFPA 101, subparagraphs 26-2.2.1 and 27-2.2.1 are amended by the addition of an Exception to read as follows:

Exception: Bi-fold, pocket, and "accordion" doors must be allowed as the door(s) to a single room, if all the requirements of 5-2.1.3.1, Exception No. 1 are met.

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Sec. 51 NFPA 101, subparagraphs 26-2.3.2, 27-2.3.2 are amended by the addition of an Exception to read as follows:

Exception: Within tenant areas of 5000 square feet or less,

the minimum clear width of aisles, corridors, or passageways must be 36 inches.

Sec. 52 NFPA 101, subparagraphs 26-2.4 and 27-2.4.2 Exception No. 2 is amended to read as follows:

Exception No. 2: Any two story business occupancy building not exceeding 3000 square feet gross floor area per floor must be permitted with an approved outside stairway, or a single totally enclosed interior stairway to the second floor having discharge directly outside the building, if the total travel distance to the outside of the building does not exceed 100 feet, the travel distance to the interior stairway does not exceed 75 feet, and such interior stairway does not communicate with any other floor, except as follows: An interior single exit stairway must be permitted to be arranged as a floor communicating stair, with one (1) hour fire resistance rated opening protectives at the entrances from each level, and protection provided as follows: The building must be provided with a non-supervised AC hard-wired smoke detection and alarm system in accordance with Sec. 23 of this regulation, arranged to sound an alarm audible throughout each level, and the stairway must be provided with approved automatic sprinkler protection, with sprinklers located at the top of the stair and over each landing and on the tenant side of each interior fire door leading to the stairway, in accordance with NFPA 13.

*27-2.4.2(a) [Delete per Sec. 9 of this regulation]

Sec. 53 NFPA 101, subparagraphs 26-3.4.3.1(b), and 27-3.4.3.1(b), are amended to read as follows: Sound an audible alarm in a constantly attended location and transmit a signal to a U.L. listed Central Station in accordance with 7-6.1.4.

**26-3.4.3.2, 26-4.2.3.2, 27-3.4.3.2 [Amend per Sec. 26 of this regulation]

*26-3.5, 27-3.5 [Delete per Sec. 9 of this regulation]

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Sec. 54 NFPA 101, subparagraph 28-2.4.1 is amended by numbering the

existing Exception as Exception No. 1 and adding an Exception No. 2 to read as follows:

Exception No. 2: Existing special purpose industrial occupancies.

Sec. 55 NFPA 101, subparagraph 28-2.7 is amended by the addition of an Exception to read as follows:

Exception: In special purpose industrial occupancies, spaces not subject to human occupancy because of the presence of machinery or equipment must be permitted with 100% of the exits discharging through a level of exit discharge.

Sec. 56 NFPA 101, subparagraphs 28-3.4.3.1, 29-3.4.3.1 and 29-8.3.4.3.1 are amended to read as follows: The required fire alarm system must meet Section 7-6.3.

Sec. 57 NFPA 101, subparagraph 29-8.2.6 is amended as follows: On the second and third lines, change "150 ft. (45 m)" to "200 ft. (60 m)". Exception No. 1 and No. 2 are amended to read as follows:

Exception No. 1: Maximum travel distance must be 300 ft. (91 m) for open floors of unsprinklered open air parking garages.

Exception No. 2: Maximum travel distance must be 300 ft. (91 m) for enclosed parking garages protected throughout by an approved automatic sprinkler system in accordance with Section 7-7.

Sec. 58 NFPA 101, subparagraph 30-1.3.3 "Exception (a)" is amended to read as follows: (a) The level is provided on at least one side with at least 20 sq. ft. (1.9 sq. m) of opening entirely above adjoining grade level in each 50 ft. (15 m) of exterior wall area (at least two side where the opposite wall of such story is more than 75 ft. from the openings), and

Sec. 59 NFPA 101, subparagraph 30-1.3.7(a) and 30-1.3.7.2(b) are amended to read as follows:

30-1.3.7.1(a): The story is provided with grade level doors, access panels, or windows spaced not more than 125 ft. (38 m) apart in the exterior wall(s), on at least one side of the building (at least two sides where the opposite wall of such story is more than 75 ft. from the openings), and

30-1.3.7.2(b): Every story above the first floor is provided with access openings or windows on at least one side of the building, spaced not more than 50 ft. apart (at least two sides where the opposite wall of such story is more than 75 ft. from the openings), and

**30-8.3.1 [Amend per Sec. 26 of this regulation]

Sec. 60 NFPA 101, subparagraph 30-8.4.2 is amended by the addition of an item (h) to read as follows: (h) Stair pressurization.

Sec. 61 NFPA 101, subparagraph 30-8.5(f), (h), (i), and new (j) are amended/added, as applicable, to read as follows:

- (f) Emergency generator status indicators, and remote starting.
- (h) Fire pump status indicators and remote starting only.
- (i) A telephone for fire department use with access to the public telephone system.
- (j) Air supervision indicators for each different dry pipe sprinkler system.

Sec. 62 NFPA 101, subparagraph 30-8.3.1 is amended by the addition of a second paragraph to read as follows: The voice fire alarm system must send a predetermined message to the floor where the alarm originated, and to the floor immediately below and above, providing information and direction to the occupants. Any subsequent alarm(s) on other than the initial fire floor must initiate the voice fire alarm as described above. The voice fire alarm must be designed to be heard clearly by all occupants within the designated portions thereof as required by Section 7-6, but it must not sound automatically in elevator cars and enclosed exit stairways. Communicating levels must be considered one floor/fire area for the audible and visual fire alarm signals.

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Sec. 63 NFPA 101, subparagraph 30-8.5(i) is amended to read as follows:
(i) A telephone for fire department use with direct access to the public telephone system.

Sec. 64 NFPA 101, subparagraphs 31-3.6 and 31-3.7 are amended by adding a second sentence to read as follows: A written prearranged plan of escape in case of fire or other emergency must be readily available for reference and inspection purposes. This emergency plan must include a means and procedure to alert all occupants of an emergency.

This regulation will become effective upon adoption by the County Council.

Approved,

Douglas M. Duncan
County Executive